

Department Mission

We deliver high quality utility services professionally, efficiently and in an environmentally responsible manner to ensure the health and safety of our community.

Department Vision

We are nationally recognized as a leading public utilities organization.

Department Operating Principles

Customer Focus - We are here to provide service to our customers and we respond to their needs and interests in a respectful, reliable and professional manner.

Financial Viability - We provide the best value for our customers by performing our work in a cost effective and innovative manner while ensuring adequate and affordable utility rates.

Total Quality - We provide the highest quality products and services so that we meet and exceed the expectations of our customers.

Environmental Responsibility - We plan and manage our operations as responsible stewards of our natural resources and the environment.

Safety Awareness - We perform our work with a high level of safety awareness for ourselves, our fellow employees and the general public.

Employee Respect - We respect and value the contributions of our employees because everyone is important to the success of our operations.



DIRECTOR'S MESSAGE

The City of Fresno Department of Public Utilities is proud to provide utility services that include water supply and distribution, wastewater collection and treatment, litter control and refuse and recycling removal to over 550,000 people in the Fresno area. Our mission is to deliver high quality utility services professionally, efficiently and in an environmentally responsible manner to ensure the health and safety of our community.

We are facing a number of strategic challenges in the coming years, such as the need to replace and repair our aging water and sewer infrastructure, mandatory compliance with increasingly strict federal and state regulations that place additional funding demands on

our utilities, a declining groundwater table that threatens our future water supply, and an ongoing weak economy that makes many of our business activities more difficult. These issues underscore the importance of having a sound strategic plan to deal effectively with them.



The City of Fresno's water table is dropping at a troubling rate. The Metropolitan Water Plan offers a more balanced. sustainable approach to delivering water.

Our strategic plan outlines our objectives, measures, targets and initiatives for achieving our vision and ensuring continuous improvement and excellence in operations over the 2013-2015 timeframe. This document is intended to help our stakeholders and customers

better understand our strategic direction so they can make informed decisions today that will help support our future success.

The Department of Public Utilities is ready and working 24/7, 365 days a year to ensure that our customers are provided with "Life's Essential Services" in a most professional and efficient manner now and in the future. Our people are not satisfied unless they are going above and beyond the call of duty to provide the very best services for all our customers.

Patrick Wiemiller, *Director*

PROVIDING LIFE'S ESSENTIAL SERVICES

More than a half million people living in the greater Fresno area rely on the City of Fresno Department of Public Utilities (DPU) for sustainable water and wastewater management services.

The Water Division is responsible for delivering a safe, affordable and reliable supply of high-quality, potable water for domestic, commercial, institutional and industrial use.

The Wastewater Management Division is responsible for the collection, conveyance, treatment and reclamation (recycling) of wastewater generated by residential, commercial, institutional and industrial sewer customers.

The DPU Administration coordinates all of the City's water and wastewater utility services including management and support of its operating divisions in the areas of strategic business planning, performance improvement, resource management, organizational development, personnel and labor relations, fiscal management, project management, utility billing and collection, and utility planning and engineering.

The efficiency and effectiveness of the department were officially recognized in May of 2012, when DPU earned accreditation from the American Public Works Association (APWA) by demonstrating exemplary management practices. In all, 330 APWA nationally-established best management practices were examined and DPU was found to have met or exceeded all of them, earning national accreditation through 2016, when the department will undergo the process of re-accreditation.

Water Division

The original Fresno water system began in 1876 as a nonprofit organization established by a group of public-minded citizens. Initially, the water system consisted of one pumping station, composed of small pumps and two storage tanks located above the second floor of an early building, located on Fresno Street between J and K Streets, presently known as Broadway and Fulton.

Now more than a hundred years later, as the City of Fresno has grown, so has our water system. The robust and sophisticated water system utilizes current technologies for producing, treating and distributing safe, affordable and reliable drinking water.

Approximately 180 Water Division employees manage the water system. Together, they operate approximately 260 pump stations throughout the City with a high-tech production and distributed control system, manage more than 200 acres of recharge basins, maintain nearly 1,800 miles of water pipeline, maintain approximately 13,000 fire hydrants and operate a 30 million gallon per day (MGD) Surface Water Treatment Facility in northeast Fresno plus a 2 MGD storage tank in southeast Fresno.

Wastewater Management Division (WMD)

The City of Fresno initiated its first sewer system in 1891 with the construction of an outfall sewer to a 40-acre "sewer farm" located southwest of Fresno. The acreage proved to be inadequate for the town and an additional 40 acres was purchased to increase capacity. The sewage was used for irrigating alfalfa crops. Eight septic tanks were constructed in 1907 to provide partial treatment of the sewage prior to land spreading and irrigation.

Today, approximately 165 employees treat and reclaim 60-70 million gallons per day (MGD) of wastewater in the Fresno-Clovis metropolitan area at an 80 MGD Regional Wastewater Reclamation Facility (RWRF) in southwest Fresno. It is the eighth largest wastewater treatment facility in California. Wastewater Management Division also operates a Power Generation Facility at the RWRF with a capacity of 9 megawatts, or enough to provide electricity for about 9,000 homes. The power, generated by a mixture of renewable methane gas from wastewater plant digesters and natural gas, is currently used to provide electricity at the RWRF.

Wastewater from homes and businesses in the metro area travels through approximately 1,700 miles of sanitary sewer lines, also maintained by the WMD, to the RWRF located in southwest Fresno. Treatment consists of primary and secondary treatment, as well as a process to treat solids removed in the process at the plant.



OUR PLANNING PROCESS

The Department of Public Utilities developed its first Strategic Business Plan (SBP) in 2003 as a way to better manage its operations. In 2010, DPU began using the Balanced Scorecard (BSC) methodology as a way to further improve its strategy implementation. The BSC identifies four perspectives, or strategic priorities, that an organization can use to ensure its goals and objectives are balanced across all stakeholders. The four BSC perspectives are financial, customers, internal processes and our people. The Water Division has been conducting monthly business reviews using the BSC since 2010, while the Wastewater Management Division has just begun using the BSC in 2013.

In 2008, the U.S. Environmental Protection Agency (EPA), along with six national water and wastewater associations, developed a utility-based planning tool called Effective Utility Management (EUM) that supplements the BSC. EUM identifies ten attributes for water and wastewater utilities to use as a basis for improving their operations.

The ten attributes are:

- Product Quality
- Customer Satisfaction
- Employee and Leadership Development
- Community Sustainability
- Infrastructure Stability
- Financial Viability
- Operational Optimization
- Operational Resiliency
- Water Resource Adequacy
- Stakeholder Understanding and Support

DPU has begun using EUM, combined with the BSC, to develop and implement updated SBPs for its divisions. The SBPs include the following components:

- Perspectives: strategic priorities that ensure objectives are balanced across all stakeholders
- **Objectives:** the highest-level goals of our organization
- Measures and Measure Targets: quantitative indicators that show when we've achieved our objectives
- **Initiatives:** time-bound, resourced improvement projects for achieving our measure targets and objectives



WATER AND WASTEWATER UTILITY ENVIRONMENT

The ever-demanding economic and fiscal environment for water and wastewater utilities has become even more challenging in the past several years. The economic problems that began with the 2007 housing market crisis have caused a delay in needed capital improvements for many utilities. This, in turn, has made the maintenance of service levels problematic, caused reserves to be reduced in many cases, created more public opposition to utility rate increases and made it more difficult to obtain approval for needed rate adjustments from political bodies.

According to a 2011 report sponsored by the American Water Works Association (AWWA), the above trends will likely be long-lasting, and in fact, a structural change may have occurred due to these and other factors:

- The excess housing inventory will likely take many years to reduce, which will dampen U.S. economic growth
- Grant funding, which has been fairly plentiful in the past, is currently very limited and additional funding for utility capital programs will be limited
- Repairing and replacing assets, especially underground assets, is a critical need, yet it is difficult for utilities to determine a process for efficiently and effectively meeting this objective
- Water and wastewater utilities are being impacted by climate change, which affects the predictability, timing and extent of natural rainfall and snowfall patterns
- Increasingly stringent federal and state regulatory requirements will continue to place significant funding demands on water and wastewater utilities

Beyond these issues are additional challenges unique to the City of Fresno, namely:

- a declining water table
- environmental issues affecting our surface water supply
- limited water storage capacity
- aging water and sewer infrastructure
- agricultural / industrial pollution concerns

Several steps were recommended by the AWWA report for water and wastewater utilities to succeed in this shifting environment:

- Strive for continuous improvement through strategic planning and operational optimization
- Prepare a multi-year financial plan
- Utilize performance measure benchmarking
- Develop policies for funding reserves to prepare for unexpected events
- Identify key stakeholders and involve them early and often
- Educate the public as to why rate increases are necessary and about the long-term consequences of not maintaining the water and wastewater infrastructure

The City of Fresno Department of Public Utilities follows all of the above recommendations and we believe that the 2013-2015 Strategic Business Plans for both the Water and Wastewater Management Divisions will position our utilities for continued success during these challenging times.



WATER DIVISION STRATEGIC BUSINESS PLAN 2013-2015

Perspectives Strategic priorities that ensure objectives are balanced across all stakeholders	Financial	Internal Processes	Customers &	Our People	
Utility Attributes Desired outcomes for our organization to use in making improvements	Financial Viability	Infrastructure Stability	Water Resource Adequacy	Stakeholder Understanding & Support	Employee & Leadership Development
	Understand the full life-cycle cost of the utility and establish and maintain an effective balance between long-term debt, asset values, operations, and maintenance expenditures, and operating revenues. Establish predictable rates-adequate to recover costs, provide for reserves, maintain favorable bond rating agencies, and plan and invest for future needs.	Maintain and enhance the condition of all assets over the long-term at the lowest possible life-cycle cost and acceptable risk consistent with customer, community, and regulatory-supported service levels, and consistent with anticipated growth and system reliability goals.	Ensure water availability consistent with current and future customer needs through long-term resource supply and demand analysis, conservation, public education and industry leadership involvement.	Engage stakeholders, generate understanding and support from oversight bodies, community regulatory bodies for service levels, rate structures, operating budgets, capital improvement programs, and risk management decisions.	Recruit and retain a workforce that is competent, motivated, adaptive and safeworking. Establish a participatory, collaborative organization dedicated to continual learning. Ensure employee institutional knowledge is retained. Emphasize opportunities for professional and leadership development.
Objectives The highest level goals of our organization	Ensure effective budget development and compliance Develop an adequate and equitable rate plan	Ensure infrastructure and assets are maintained, secured, replaced and upgraded	Ensure and retain adequate water supply	Ensure stakeholder awareness of the Water Division and the value of water Expand Water Division's leadership role within the industry and the community Develop more collaborative relationships with other agencies	Promote employee satisfaction, evaluation and recognition Enhance workforce knowledge and skills Improve internal division communications Promote employee safety, security and health
Measures Quantitative indicators that show when we have achieved our objectives	Debt ratio Percentage of capital expenditures to total capital budget Bond ratings Total dollars available in reserve Percentage of annual 0&M budget spent Percentage of capital program funded from debt Debt coverage ratio	Condition assessment coverage Asset renewal/replacement Leakage and breakage frequency rate Planned maintenance ratio O&M cost per million gallons of water delivered O&M cost per million gallons of surface water processed	Acre feet of surface water treated Percentage of reduction in gallons per capita per day Total acre feet recharged at basins Groundwater table elevation	Number of informational outreach events and other public educational efforts participated in Professional attendance - Number of employees attending professional events, planning groups and regional efforts Professional Leadership roles achieved	Employee job satisfaction Percentage of employee evaluations completed on time Training hours per employee Number of positions vacant Key position internal/external recruitment Employee communication survey score Total recordable incident rate Percent of lost work days due to OJI to total work days
Initiatives Time-bound, resourced improvement projects for achieving our targets and objectives	Gain approval for the proposed FY 2014-FY 2017 Four-Year Water Rate Plan Manage the Division's budget and finances to improve bond ratings Conduct a thorough risk assessment to improve operational efficiency, effectiveness and resiliency	Complete Water Master Plan by the end of 2013 Develop a Program Management Plan by January 2014 Output Develop a Program Management Plan by January 2014	Complete Metro Plan by end of 2013 Prioritize long term resource contracts and agreements	Identify stakeholders and the best methods of conveying messages they need Identify and track professional attendance opportunities for employees Identify and track leadership opportunities as decision-makers and solicit and provide support for papers, presentations and abstracts	Implement AWWA Training Program Analyze and develop a plan for improving employee survey results

WASTEWATER MANAGEMENT DIVISION STRATEGIC BUSINESS PLAN 2013-2015

Perspectives Strategic priorities that ensure objectives are balanced across all stakeholders	Customers & Stakeholders	Financial	Internal Processes			Our People
	Product Quality	Financial Viability	Infrastructure Stability	Operational Optimization	Operational Resiliency	Employee & Leadership Development
Utility Attributes Desired outcomes for our organization to use in making improvements	Produces treated effluent, and process residuals in full compliance with regulatory and reliability requirements and consistent with customer, public health, and ecological needs.	Understands the full life-cycle cost of the utility and establishes and maintains an effective balance between long-term debt, asset values, O&M expenditures, and operating revenues. Establishes predictable rates, consistent with community acceptability, adequate to recover costs, provide for reserves, maintain bond ratings, and plan and invest for future needs.	Maintain and enhance the condition of all assets over the long-term at the lowest possible life-cycle cost and acceptable risk consistent with customer, community, and regulatory-supported service levels, and consistent with anticipated growth and system reliability goals.	Ensures ongoing, timely, cost-effective, reliable, and sustainable performance improvements. Minimizes resource use, loss, and impacts from day-to-day operations. Maintains awareness of information and operational technology developments to anticipate and support timely adoption of improvements.	Ensures utility leadership and staff work together to anticipate and avoid problems. Proactively identifies, assesses, establishes tolerance levels for, and effectively manages a full range of business risks (including legal, regulatory, financial, environmental, safety, security, and natural disaster-related) in a proactive way consistent with industry trends and system reliability goals.	Recruit and retain a workforce that is competent, motivated, adaptive and safe-working. Establish a participatory, collaborative organization dedicated to continual learning. Ensure employee institutional knowledge is retained. Emphasize opportunities for professional and leadership development.
Objectives The highest level goals of our organization	Comply with local, state, and federal standards to protect the health and safety of the public	Ensure effective budget development and compliance Develop an adequate and equitable rate plan	Ensure infrastructure and assets are maintained, secured, replaced and upgraded Routinely assess infrastructure conditions based on asset type	Expand the use of technology Maximize utilization of renewable resources Continue to improve process efficiencies	Ensure continuous operations during emergency events Promote employee safety, security and health	Attract, recruit, and retain qualified staff Enhance workforce knowledge and skills
Measures Quantitative indicators that show when we have achieved our objectives	TSS Removal Efficiency BOD Removal Efficiency Number of Sanitary Sewer Overflows (SSO) per 100 miles Sample turnaround time Industrial Compliance Acre feet of water reuse	Debt coverage ratio Percentage of annual 0&M budget spent Bond ratings Percentage of annual budgeted customer user revenue received Percentage of targeted project milestones met Capital Reserve Policy O&M Reserve Policy	Planned maintenance ratio by cost at RWRF Collection System Failure Rate Condition assessment coverage for treatment facilities Percentage of sewer collection system inspected	Energy use per volume processed Cost per KWH produced Percentage of KWH demand produced by PGF Chemical use per volume processed Maintenance cost per MGD at RWRF O&M cost per volume processed Miles cleaned per employee per day	ERP coverage & preparedness Total recordable incident rate Percent of lost work days due to OJI to total work days	Number of certifications above minimum requirements Training hours per employee Percentage of employee evaluations completed on time Number of positions vacant Number of division administrative policies reviewed and updated
Initiatives Time-bound, resourced improvement projects for achieving our targets and objectives	Conduct an annual audit of SSMP Maintain process efficiency through maximum automation Inspect all industrial users on a quarterly basis Gain Council approval of Recycled Water Master Plan and EIR Implement Phase I of Tertiary Treatment and Distribution	Annually update the financial planning model Implement program to improve inventory control Gain formal approval for reserve policies	Complete updates of Treatment Master Plan Complete updates of Collection System Master Plan Develop an asset condition assessment program (TBD)	Develop a measure to monitor the usage of thermal energy (TBD) Evaluate the opportunities for a power purchase agreement Identify renewable energy opportunities Optimize ferric chloride usage by determining minimum dosage requirements Monthly evaluation of miles cleaned per employee	Develop an ERP training program Develop a process for performing a root cause analysis of all accidents	Identify opportunities to improve employee engagement and leadership in industry associations

AWWA - American Water Works Association BOD - Biochemical Oxygen Demand EIR - Environmental Impact Report ERP - Emergency Response Plan KWH - Kilowatt Hour MGD - Million Gallons Per Day 0&M - Operation and Maintenance PGF - Power Generation Facility RWRF - Regional Wastewater Reclamation Facility SSMP - Sanitary Sewer Management Plan SSO - Sanitary Sewer Overflow TSS - Total Suspended Solids





DEPARTMENT OF **PUBLIC UTILITIES**Providing Life's Essential Services

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